



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/623,588	07/22/2003	Gary Schlatter	ORA-005	5846
21984 7590 02/11/2008 WELSH & FLAXMAN LLC 2000 DUKE STREET, SUITE 100 ALEXANDRIA, VA 22314				
EXAMINER				
SMALLEY, JAMES N				
ART UNIT		PAPER NUMBER		
3781				
MAIL DATE		DELIVERY MODE		
02/11/2008		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.



UNITED STATES PATENT AND TRADEMARK OFFICE

Commissioner for Patents  
United States Patent and Trademark Office  
P.O. Box 1450  
Alexandria, VA 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/623,588  
Filing Date: July 22, 2003  
Appellant(s): SCHLATTER, GARY

\_\_\_\_\_  
John L. Welsh  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 13 November 2007 appealing from the Office action mailed 14 May 2007.

Art Unit: 3700

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

5,996,191	CHRISTLER	12-1999
D485,757	ROTH et al.	01-2004
2004/0217139	ROTH et al.	11-2004
D433,562	REDLINGER	11-2000
5,146,657	FRANO	9-1992

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

**NEW GROUNDS OF REJECTION**

Art Unit: 3700

a) Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Roth et al. US D485,757** in view of **Christler US 5,996,191**.

This is a new grounds of rejection. Instead of relying on Roth '757 for priority, Examiner presents a new ground of rejection using the design patent directly, instead of relying on it for priority. However, this does not change Examiner's position, and, Examiner has replied to all of Appellant's arguments.

Roth '757 teaches a dispensing container with an integrally formed hook and gate which allows the device to be attached an object. The hook and gate members each have respective upwardly extending connecting members, read by the examiner to be the stems of each element as they project outward from the cap top surface.

The reference fails to teach a first arcuate portion and second arcuate portion which overlap along a substantial portion of their respective arcs.

Christler '191 teaches a hookless connecting ring formed of resilient plastic, teaching an overlap length "o" along arcuate ends of the ring, and furthermore disclosing in column 3, lines 59-66 that the length of the overlap "o" about four times the width of the material. Although disclosed for keyrings, Examiner notes the structure is essentially the same as that of Roth '757, in that a closed loop is formed by the rings, and the resilient distortion of the ring arms relative to each other allows a connection to form between the ring and object, for temporary attachment. Thus it is the Examiner's position that one of ordinary skill would look to Christler '191 as a potential modification for the hook and gate of Roth '757.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the gates taught by Roth '757, forming them to overlap along a length of arcuate portions as taught by Christler '191, motivated by the benefit of providing a resilient closed loop connection equally capable of securing the ring to an object. Furthermore, Examiner notes that by forming this overlap four times the width of the material width, the length of the overlap would appear to comprise a "substantial overlap," evidenced by the substantially thicker gauge of the ring of Roth '757 than that of Christler '191.

With the above modification, the rings would appear to be less than 2 mm apart from each other, based on an average sized keyring assuming a diameter of approximately 1 inch. Furthermore, by being disposed further outwardly from the center, outer ring (14) has a greater radial length than inner ring

Art Unit: 3700

segment (16). Furthermore, regarding claim 8, the fact that the entirety of the hook comprises a half-circumference, in that it extends from a first upwardly extending member about the full arc to the second upwardly extending member, implies the total arc has a length of 180 degrees. It is the Examiner's position that the overlap "o" taught by Christler '191, when applied to Roth '757 will ultimately being longer than the overlap shown in Christler '191 by virtue of the fact that the hook and gate of Roth '757 appear to comprise a thicker gauge, and thus the arcuate lengths would appear to be at least 120 degrees. Lastly, Examiner notes the distal ends of the rings in both references are tapered.

Regarding claims 4, 7, 12 and 14, Examiner notes figure 3, whereby it can be seen the first upwardly extending portion (located below 24) extends higher than the second upwardly extending portion (located below 42).

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

b) Claims 2, 9 and 17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 2 limits the first arcuate member having a slightly smaller radius of curvature than the second arcuate member. It appears this is a typographical error; it is clear from the Specification that the first arcuate member (52) lies radially outwardly of the second arcuate member (56), and thus the second arcuate member has a smaller radius of curvature than the first arcuate member. The typographical error also appears in Specification, page 8, lines 10-13; however examiner notes that despite the error, it is clear that Applicant intended to state the first arcuate member (52) would have a longer radius of curvature than the second arcuate member (56), as the actual radii have been drawn in to figure 2.

c) Claims 1-3, 5-6, 8-11, 13, 15-18 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Redlinger US D433,562 in view of Christler US 5,996,191.

Art Unit: 3700

Redlinger '562 teaches a lip balm keychain. While the title is the only written description provided, it is clear the lip balm container is of standard convention comprising a container which will dispense lip balm through an open top by the turning action of the wheel on the closed end of the container. The cap includes a keyring which also appears to be that of standard convention.

The reference fails to teach the first and second arm lying in overlying mating configuration.

Christler '191 discloses a hookless connection ring, teaching in column 2, line 14 that the loop could be used for keys. In column 1, lines 38-43, the reference teaches that the ends of the ring are displaceable either axially or circumferentially, due to the resiliency of the plastic from which the ring is made. Clearly, this offers a much higher degree of freedom from the standard key ring, in which a user must pry off one end of the loop, and thread the key through one full revolution in order to secure it on the ring.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the lip balm key chain of Redlinger '562, providing the hookless connection ring taught by Christler '191, motivated by the benefit of providing flexibility to the ring in order to allow a user to gain access to the loop by prying it open in either the axial or circumferential direction.

With the loop of Christler '191 applied to the lip balm key chain of Redlinger '562, Examiner reads lower loop segment (16) as the first arcuate member, and upper loop segment (14) as the second arcuate member. The respective branches of loop (12) from which each of these arcuate members extend are read to be the respective first and second arms, and the loop through which the key ring passes on the lip balm key chain cap (unlabeled; see figure 1) is read to be the clasp. The arcuate portions overlap along an entirety of their respective arcs, which is more than a "substantial" overlap.

Regarding claim 3, Examiner notes that because the second arcuate member (14) is located radially outwardly of the first arcuate member, it inherently has a longer arc length.

Regarding claims 6, 11 and 20, it is not clear how far apart the first and second arms are positioned. However, Examiner notes the claim limits them to be positioned "2 mm or less from one another." Because the arms, as defined above by the Examiner, are integrally connected with each other, they are 0 mm apart, and thus meet the claimed limitation.

Art Unit: 3700

Regarding claim 8, Examiner notes that while Christler '191 fails to teach the exact dimensions of the ring, it does teach in column 3, lines 59-66 that the length of the overlap may be adjusted. Furthermore, Examiner notes the claim limits two 120-degree arc arms which overlap along 60 degrees. Thus, 240 degrees of length are required, 60 degrees of which overlap. With a complete loop, this leaves 120 degrees as "excess", and thus Christler '191 clearly teaches two arms of at least 120 degrees. Furthermore, Examiner notes the overlap appears to be in the general area of 60 degrees, as rough measuring shows it would take 3 overlaps, as shown in figure 1, to make an approximate half of a circle. This would indicate the overlap is in the vicinity of 60-degrees. Regardless, because the reference teaches varying the length of the overlap, to provide the requisite bias, it would have been obvious to one of ordinary skill in the art at the time the invention was made to form the overlap to 60 degrees, or to any other optimal length, motivated by the benefit of providing an optimal, or desirable, bias in the loop, as taught by Christler '191. A change in size is generally recognized as being within the level of ordinary skill in the art. *In re Rose*, 105 USPQ 237 (CCPA 1955). Furthermore, it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

#### **(10) Response to Argument**

##### **I. Claims 1-20 are patentable over Roth in view of Christler**

***Appellant asserts a prima facie case of obviousness has not been made.***

Examiner asserts that one of ordinary skill in the art at the time the invention was made would see that Roth clearly teaches a gap in an otherwise-complete loop which is attached to a lid for a bottle. Also, when looking at figure 3, one of ordinary skill in the art would find it obvious that the smaller portion of the loop, located on the right side of the loop, is a gate because it has a severely-reduced thickness at its base, and, the slot is angled such that the smaller portion cannot slip out past the opposing end of the larger portion of the loop, much like a carabiner. So, one of ordinary skill would find it obvious in view of these details that the design shown is for a clip.

Art Unit: 3700

Next, one of ordinary skill in the art would find it obvious in view of the teaching of Christler '191, column 3, lines 59-66 that the length of the overlap taught therein may be adjusted in order to obtain a particular bias between the two gate members.

Combining these two references, one of ordinary skill in the art at the time the invention was made would have found it obvious to modify the length of the overlap of the gate members of the lid of Roth '757, forming them to a desired length, in order to obtain a particular biasing force, and ultimately gain axial and circumferential flexibility in the gate members of lid of Roth '757 which would permit easier clipping.

Thus, Examiner asserts that one of ordinary skill would find the motivation to modify Roth in the teachings of Roth and particularly in the disclosure of Christler.

***Appellant asserts that one of ordinary skill in the art would not be lead to find the lid of Roth '757 as selectively removable.***

Examiner notes that one of ordinary skill would, in fact, find it obvious that the lid could be removed because it is for a bottle, which are traditionally known to carry contents meant to be dispensed. As there is no dispensing structure shown on the lid, one would presumably have to remove the cap in order to access the contents.

Should the Board find Appellant's arguments persuasive regarding one of ordinary skill in the art culling structural and functional details from Roth '757 because it is a design patent, Examiner offers the following arguments. The art of container closures is well developed, and the level of complexity of caps and lids for containers sometimes matches those in other technological endeavors. Thus, one of ordinary skill in the closures arts will be able to make logical assumptions about the structure shown in Roth '757, based on knowledge of other similar closures, and would not approach this invention blind. At the very least, one of ordinary skill could reasonably assume that the lid is removable from the container. Examiner notes that the required structures to prevent removal from the bottle **would be seen in the bottom view, figure 6**. However, since the bottom view does not show any ratchet teeth, or other such removal-preventing structures which are known in the art, one of ordinary skill could reasonably assume that the lid is removable.



Art Unit: 3700

One of ordinary skill would look at figure 3, for example, and wonder why a loop is shown, but instead of being a complete loop of uniform thickness, a right-most portion of the loop is thinned, and, separated from the larger hook-shaped portion by an angled slot. Clearly, this has to serve a function, or else it would not be there. One of ordinary skill in the closure art is a trained engineer and is taught by nature to ask intelligent questions and make reasonable assumptions. Examiner has included Frano US 5,146,657 and directs the Board to figure 2, whereby a similar hook and gate-type structure is shown. Notice the similarity of the structures of figure 2 with those of figure 3 of Roth '757. Because Frano '657 was invented as late as 1992, one of ordinary skill in the art would have knowledge of this type of fastener, and would be able to recognize it in future devices. Examiner notes there are entire subclasses in class 220 in which the instant invention is classified (subclass 751, "Container hanging means (i.e., for hanging from an inanimate support device); subclass 212.5, "[closure is] combined or convertible with handle") whereby closures are provided with additional structures (handles, hanging means) which crossover into another field. Thus, being a true expert in closures means that person of ordinary skill is also an expert in closure hanging means, and thus has at the very least a rudimentary knowledge of hanging means. A scan through this subclass will reveal many clasps and other similar devices. Thus, Examiner not only asserts that a person of ordinary skill in the closures arts will have ordinary skill in at least recognizing clasps, but that the Examiner himself has ordinary skill in recognizing clasps and is thus qualified to interpret the structures of Roth '757. A person having ordinary skill in the art is presumed to have knowledge of all of the relevant prior art in his field of endeavor, as if it were all hanging on his workshop walls. *Filmon Process Corp. v. Spellright Corp.*, 274 F. Supp. 312, 313, 155 USPQ 635, 636 (D.D.C. 1967), *aff'd*, 404 F.2nd 1351, 131 U.S. App. D.C. 374, 158 USPQ 533 (1968). Examiner lastly notes that while hooks are not part of the closures art per se, the fact that Roth '757 shows a nearly identical structure would lead one of ordinary skill to seek out the structure in other fields, perhaps by consulting with others of ordinary skill.

Examiner concludes by asserting that Appellant wants you to believe that one of ordinary skill would look at Roth '757, and be completely dumfounded to the point that he would conclude the shown features served no purpose, and no logical assumptions could be made. However, when considering the

Art Unit: 3700

level of ordinary skill, along with the training and the knowledge of other prior-art devices, one of ordinary skill would be able to successfully make logical deductions which would result in the conclusion that Roth '757 is, in fact, teaching a hook-and-gate type assembly. From this, it would be obvious to look at a teaching such as Christler '191 -- as it is also drawn to hooks/clasps -- learn from its teachings such as the fact that by varying the length of the overlap, the resultant biasing forces can be varied by varying the length of the overlap, and apply this benefit to the lid taught by Roth '757. The rejection presented herein is far from a fabrication, but instead, would be the result of astute observation and educated assumption.

To conclude, using the guidelines from KSR:

***1) Applying a known technique to a known device ready for improvement to yield predictable results.***

One of ordinary skill will recognize the clasp/ring in the design patent to Roth, and look to another clasp/ring such as Christler '191, extract a teaching from the reference such as varying the length of the overlap in order to obtain a particular biasing force, and apply that to Roth.

***2) Known work in one field of endeavor may prompt variation of it for use in either the same field or a different one based on design incentives or other market forces if the variations would have been predictable to one of ordinary skill in the art.***

As there is a separate subclass in 220 (220/751) drawn to means provided on a closure to hang it, one of ordinary skill in the closure art would recognize a clasp used to hang a container via the closure in a design patent, and then turn to other teachings of how to modify a clasp in order to obtain a desired result, i.e. how to vary the biasing force in the clasp.

***3) some teaching, suggestion or motivation in the prior art that would have lead one of ordinary skill to modify the prior art reference or to combine prior art reference teachings to arrive at the claimed invention.***

Christler '191 is clear that varying the length of the overlap will result in varying how easy/difficult it will be for someone to part the arms of the clasp. Thus, one of ordinary skill would be lead by this teaching to modify Roth '757 in order to obtain a desired bias which will make it easier/harder to part the arms of the clasp and hang the container.

Art Unit: 3700

**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

This examiner's answer contains a new ground of rejection set forth in section (9) above. Accordingly, appellant must within **TWO MONTHS** from the date of this answer exercise one of the following two options to avoid *sua sponte* dismissal of the appeal as to the claims subject to the new ground of rejection:

(1) **Reopen prosecution.** Request that prosecution be reopened before the primary examiner by filing a reply under 37 CFR 1.111 with or without amendment, affidavit or other evidence. Any amendment, affidavit or other evidence must be relevant to the new grounds of rejection. A request that complies with 37 CFR 41.39(b)(1) will be entered and considered. Any request that prosecution be reopened will be treated as a request to withdraw the appeal.

(2) **Maintain appeal.** Request that the appeal be maintained by filing a reply brief as set forth in 37 CFR 41.41. Such a reply brief must address each new ground of rejection as set forth in 37 CFR 41.37(c)(1)(vii) and should be in compliance with the other requirements of 37 CFR 41.37(c). If a reply brief filed pursuant to 37 CFR 41.39(b)(2) is accompanied by any amendment, affidavit or other evidence, it shall be treated as a request that prosecution be reopened before the primary examiner under 37 CFR 41.39(b)(1).

Extensions of time under 37 CFR 1.136(a) are not applicable to the TWO MONTH time period set forth above. See 37 CFR 1.136(b) for extensions of time to reply for patent applications and 37 CFR 1.550(c) for extensions of time to reply for ex parte reexamination proceedings.

Respectfully submitted,

/James N Smalley/

Examiner, Art Unit 3781

Art Unit: 3700

**A Technology Center Director or designee must personally approve the new ground(s) of rejection set forth in section (9) above by signing below:**

Karen Young

/KAREN M. YOUNG/

Director, Technology Center 3700

Conferees:

/Nathan J. Newhouse/

Supervisory Patent Examiner, Art Unit 3782

/Anthony D Stashick/

Supervisory Patent Examiner, Art Unit 3781